Amendments to the Specification:

Please replace the paragraph starting on page 10, line 28 of the specification with the following amended paragraph:

Figure 7 is a ~~top plan~~ side view of the embodiment illustrated in Figure 6;

Please replace the paragraph starting on page 10, line 29 of the specification with the following amended paragraph:

Figure 8 is a perspective view of an embodiment in accordance with the present invention shaped like a wine glass, with a base portion, column portion, and bowl portion with substantially convex side walls with ribs;

Please replace the paragraph starting on page 11, line 6 of the specification with the following amended paragraph:

Figure 10 is ~~a longitudinal cross section of an artery similar to that illustrated in Figure 9 further illustrating the addition of a sheath in the lumen of the artery,~~ an embodiment covering the neck of the aneurysm;

Please replace the paragraph starting on page 11, line 12 of the specification with the following amended paragraph:

Figure 12 is a side view of an embodiment in accordance with the present invention ~~similar to Figure 6~~ wherein the bottom surface of the bowl is rounded;

Please replace the paragraph starting on page 11, line 14 of the specification with the following amended paragraph:

Figure 13 illustrates an alternative embodiment of the present invention in the shape of a wine glass with a base portion, column portion, and bowl portion with substantially convex side walls ~~having a scaffold-like structure~~;

Please replace the paragraph starting on page 14, line 8 of the specification with the following amended paragraph:

Referring again to Figures 6 ~~and 7~~ the illustrated implant 10 can be formed of a composite hydrophilically coated hydrophobic foam, as described hereinbelow or of other suitable material as is described herein, and is shaped like an inverted umbrella or a bowl with a central projection 12 upstanding in the bowl. Implant 10 has a flattened area 14 on an outer, generally convex surface ~~16~~ and has an inner generally concave surface 18. Extending ~~upwardly~~ downwardly from top surface ~~16~~, around the perimeter of top surface ~~16~~ are side walls ~~20~~ that curve outwardly from flattened area 14. If desired, reinforcing ribs (not shown) can be provided on inner surface ~~16~~ to increase the overall resiliency of the bowl enhancing its ability to expand to shape *in situ*.

Please replace the paragraph starting on page 14, line 19 of the specification with the following amended paragraph:

In one embodiment of the present invention, the width or thickness of projection 12 is sufficient to provide structural support to the implant and enable implant 10 to be effectively manipulated by gripping the distal tip of projection 12. To this end, projection 12

may have a thickness of approximately 10 to 40 percent of the diameter defined by side walls ~~20~~. However, in application the projection may be thicker or narrower to serve desired purposes, such as support or collapsability for insertion into the catheter. In the embodiment shown, the outer surface ~~21~~ of implant 10 is relatively smooth and designed to contact the majority of the inner wall of the aneurysm.

Please replace the paragraph starting on page 14, line 29 of the specification with the following amended paragraph:

If desired, the outer surface[[s]] ~~16 and 21~~ can be coated, after fabrication of the implant[[.]], with functional agents, such as those described herein, optionally employing an adjuvant that secures the functional agents to the surfaces and to foam pores adjacent the outer surfaces, where the agents will become quickly available. Such external coating which may be distinguished from internal coatings provided within and preferably throughout the pores of a foam implant , as described herein, can comprise fibrin and/or other agents to promote fibroblast growth.

Please replace the paragraph starting on page 15, line 8 of the specification with the following amended paragraph:

As shown in Figures 6[[7]], implant 10 is generally circular as seen in plan. However, implant 10 may have any desired shape in plan, although symmetrical shapes such as elliptical or oval are preferred. Nevertheless, polygonal shapes such as hexagonal, octagonal or dodecagonal can be employed, if desired. Furthermore, it will be appreciated that the cross sectional shape in plan need not be geometrically regular. For example, employing a reticulated

biodurable elastomeric matrix, a polymeric foam, or a comparably cleavable material, as the primary structural material of the implant, the implant can readily be trimmed to shape by the surgeon, before implantation, if desired, e.g. to fit an irregular structure within the aneurysm, possibly by making a concave, bite-shaped cutout in side walls 20.

Please replace the paragraph starting on page 15, line 19 of the specification with the following amended paragraph:

In the alternative embodiment of the invention illustrated in Figure ~~8~~ 13, an implant ~~22~~ 310 is shaped much like a wine glass. More specifically, implant ~~14~~ 310 comprises a substantially flat base ~~24~~ 36, a column ~~26~~ 42 and a bowl ~~28~~ 46. Base ~~24~~ 36 can be of any geometric shape, in the embodiment of the invention illustrated, base ~~24~~ 36 is circular. Projecting from the center of base ~~24~~ 36 and integral with base ~~24~~ 36 is a column ~~26~~ 42. The side walls ~~30~~ 38 of column ~~26~~ 42 can be straight, or as in the preferred embodiment, have a slight concavity. Attaching to and integral with column ~~26~~ 42 at an end furthest from the base ~~24~~ 36 is bowl ~~28~~ 46. Bowl ~~28~~ 46 has a rounded bottom ~~32~~ 44 with sidewalls ~~34~~ 40 extending upwardly from the rounded bottom ~~32~~ 44 the sidewalls defining a void ~~36~~ 48 within bowl ~~28~~ 46. Column ~~26~~ 42 connects to bowl ~~28~~ 46 substantially in the center of bottom ~~32~~ 44.

Please replace the paragraph starting on page 16, line 2 of the specification with the following amended paragraph:

In the embodiment illustrated in Figure [[6]]13 side walls ~~34~~ 40 continue the curve of the rounded bottom ~~32~~ 44, such that the side walls ~~34~~ 40 have a convex shape. Convex walls ~~32~~ 40 can aid in allowing blood flow within the aneurysm 7 while providing a means to

accommodate pressure produced within the aneurysm. For example, instead of the pressure within the aneurysm 7 being directed toward the neck of the aneurysm, the convex shape of side walls ~~34~~ 40 approximates the shape of the inner walls of the aneurysm in the vicinity of the neck and helps relieve pressure on those walls. Furthermore, pressure directed within bowl ~~28~~ 48 will be diverted toward the inner surface 47 of walls 46.

Please replace the paragraph starting on page 16, line 12 of the specification with the following amended paragraph:

Each region of implant ~~22~~ 310 serves a particular purpose. Bowl ~~28~~ 46 is inserted into an aneurysm and provides support to the walls of the aneurysm. Column ~~30~~ 42 provides support to the neck of the aneurysm. Base ~~24~~ 36 can remain outside of the aneurysm, in the lumen of the affected artery and serves to keep implant ~~22~~ 210 in place. Further, if desired in some variants of implant ~~22~~ 210, base ~~24~~ 36 can be placed against the antrum of the aneurysm and the surrounding arterial wall and serve to seal off the aneurysm.

Please replace the paragraph starting on page 16, line 20 of the specification with the following amended paragraph:

Implants 10 and ~~22~~ 310 can be readily formed of low-cost materials and can accordingly be provided in a range or kit of different sizes and shapes from which the surgeon chooses one or more to use for a specific treatment. It is not necessary to map the aneurysm before manufacturing the implant, as is the case with the Greene et al. teaching. Such a kit of multiple sizes, e.g. from 2 to 10 different sizes and possibly also different shapes, e.g. from 2 to 6

different shapes in one or more of the particular sizes can serve a range of conditions and also is particularly valuable to have available for emergency treatments.

Please replace the paragraph starting on page 17, line 19 of the specification with the following amended paragraph:

Referring to Figure 9, implant[[s]] 10 ~~and 22~~ may be seen situated in a saccular aneurysm 7. In this example, the surgeon has implanted a portion 12 of implant 10 against the artery walls most distal from the neck ~~23~~ of the aneurysm 7, and another portion of implant ~~12~~ 10 in the region of neck ~~23~~, and extending out of the antrum into the artery below. When properly located *in situ*, pursuant to the teachings of this invention, implants 10 ~~and 12~~ can immediately protect the aneurysm walls from the pulsating pressure of the blood within the aneurysm which might otherwise exploit a particular weakness in the already distended aneurysm wall, resulting in catastrophic failure of the aneurysm. While the walls are so protected, the presence of implants 10 ~~and 12~~, optionally including one or more pharmacologic agents borne on the or each implant, stimulates fibroblast proliferation, growth of scar tissue around the implants and eventual immobilization of the aneurysm.

Please replace the paragraph starting on page 18, line 8 of the specification with the following amended paragraph:

~~Implant 10 and implant 22 can be used in combination, wherein~~ [[t]]The ~~projection~~ portion 12 of implant 10 can fit at least partially inside a void ~~36~~ within implant 10 in the region of the neck ~~of implant 22~~. Alternatively, as illustrated in Figure 9, portion 12 ~~implant~~

~~10~~ can sit above the portion of implant ~~22~~ 10 in the region of the neck ~~with little or no contact between implant 10 and implant 22~~.

Please replace the paragraph starting on page 18, line 13 of the specification with the following amended paragraph:

Alternatively, as is illustrated in Figure 10, The implants described in combination with a semicircular sectioned sheath ~~38~~, such as supplied by Boston Scientific Corporation that is applied to the wall of the artery such that the neck ~~23~~ of the aneurysm is substantially centered under the middle of the sheath ~~38~~ and blood flow to the aneurysm is cut off. Alternatively, sheath ~~38~~ can be perforated to allow blood flow into the aneurysm.

Please replace the paragraph starting on page 18, line 20 of the specification with the following amended paragraph:

In yet another alternative embodiment of the invention illustrated in Figure ~~11,~~ 7, implant[[s]] 110 ~~and 122~~ having two portions, a portion 112 and a portion in the region of the neck of the aneurysm, have a ribbed outer surface, the valleys between the ribs ~~140~~ providing a channel ~~142~~ for low pressure blood flow. Further, the ribbing provides reinforcement for the walls of implant[[s]] ~~110 and 122~~.

Please replace the paragraph starting on page 19, line 1 of the specification with the following amended paragraph:

~~Referring now to~~ The implant of Fig. 12~~, implant 210~~ is similar to the implant of Fig. 10~~10~~ illustrated in ~~Figure 6~~ with the difference that the bottom surface ~~218~~ 230 is rounded

such that the curvature of bottom surface ~~218~~ 230 is continuous with that of side walls ~~220~~ 234. Bottom surface ~~218~~ 230 and side walls ~~220~~ 234 can form a substantially hemispheric shape.

Please replace the paragraph starting on page 19, line 6 of the specification with the following amended paragraph:

Implants ~~10 and 210~~ of Figs. 10 and 12 are designed such that their outer surfaces ~~20, 220 respectively~~ contact the inner walls of the aneurysm ~~1~~7. The center projections ~~12~~ 24, ~~212~~ 224 can provide support and distribution of the forces exerted by the aneurysm walls. Additionally, projection ~~12,212~~ 24, 224 can be used by the surgeon to further position such implant(s) ~~10~~ 120, 210 once inserted and released from the catheter.

Please replace the paragraph starting on page 19, line 12 of the specification with the following amended paragraph:

The inventive embodiment illustrated in Figure ~~13~~ 8 has a ~~skelatal~~ skeletal structure with open spaces between rib-like supportive members. Once inserted into the aneurysm, ribs ~~140~~ 240 can support the aneurysm walls and if desired may release one or more pharmacologic agents. Spaces such as ~~142~~ 216 between the ribs allow for blood to flow through the aneurysm.

Please replace the paragraph starting on page 19, line 18 of the specification with the following amended paragraph:

In an alternative embodiment illustrated in Figure 14, side walls 346 extend straight up from rounded bottom ~~332~~ 344 such that side walls ~~334~~ 346 form a cylinder. In this embodiment side walls ~~334~~ 346 can rest against the inner surface of the aneurysm.

Please replace the paragraph starting on page 19, line 22 of the specification with the following amended paragraph:

In yet another alternative embodiment illustrated in Figure 15, rounded bottom ~~432~~ 444 has a less acute curve then those illustrated in Figures ~~8~~ 13 and 14. In this embodiment of the invention, there are no side walls. However, it is contemplated that side walls can extend up from rounded bottom ~~432~~ 444 if necessary to further support the walls of the aneurysm.

Please replace the paragraph starting on page 19, line 28 of the specification with the following amended paragraph:

The embodiment of Figures 16 and 17 illustrates a bullet shaped insert ~~550~~ 50 with a bottom ~~552~~ 52, height ~~554~~ 54 and top section 56 all integrally formed. The top section can be of any shape, such as pointy, flattened or as in the preferred embodiment, substantially curved. The height ~~554~~ 54, which makes up the side walls of implant ~~550~~ 50, is relatively straight, and bottom ~~552~~ 52 can be of any shape, such as rounded, pointy, or as in the preferred embodiment, relatively flat. Figure 17, a bottom view of implant ~~550~~ 50, shows the slices ~~558~~ 58 made in implant ~~550~~ 50. The slices ~~558~~ 58 create sections 60 of implant ~~550~~ 50. These sections ~~560~~ 60 provide increased surface area of implant ~~550~~ 50 for more contact of the aneurysm and blood with the added chemical agents and allow implant ~~550~~ 50 to better conform to the shape of an aneurysm as it expands.

Please replace the paragraph starting on page 20, line 11 of the specification with the following amended paragraph:

In a similar embodiment illustrated in Figure 18, the sections ~~660~~ 160 of implant ~~650~~ 150 have space ~~662~~ 162 between them resembling the tentacles of an octopus or spaghetti.

Please replace the paragraph starting on page 20, line 14 of the specification with the following amended paragraph:

Figure 19 illustrates an implant ~~750~~ 250 wherein the top ~~756~~ 256 and bottom ~~752~~ 252 portions are substantially solid and the side walls comprises thin strips ~~760~~ 260. As is illustrated in Figures 20 and 21 which illustrates two embodiments of implant ~~750~~ 250, the cross section of implant ~~750~~ 250 can be hollow ~~762~~ 262, where the side wall strips ~~760~~ 260 are just around the perimeter of implant ~~750~~ 250 (Fig. 20). Alternatively, as is illustrated in Fig. 21, the cross sections, 362, as viewed along lines 20-20 can be made up of strips ~~860~~ that take up substantially the entire cross section of implant ~~750~~ 250.

Please replace the paragraph starting on page 20, line 22 of the specification with the following amended paragraph:

Fig. ~~22~~ 23 shows a generally tubular implant 930 formed of suitable porous elastomeric material as described elsewhere herein having an outer form 932 which is that of a right cylinder which is internally sculpted out to enhance the overall compressibility of the implant 930, with an open-ended hollow volume 934, which is also right cylindrical, or may have any other desired shape.

Please replace the paragraph starting on page 20, line 28 of the specification with the following amended paragraph:

Fig. ~~23~~ 22 illustrates a bullet-like implant 936 having a blind hollow volume 938. Fig. 24 illustrates a tapered, frusto-conical implant 940 which has an open-ended hollow volume 942. Implants 936 and 940 are generally similar to implant 930 and all three implants 930, 936 and 940 may have any desired external or internal cross-sectional shapes including circular, square, rectangular, polygonal and so on. Additional possible shapes are described hereinbelow. Alternatively, implants 930, 936 and 940 may be "solid", with any of the described exterior shapes, being constructed throughout of porous material and lacking a hollow interior on a macroscopic scale. Desirably, any hollow interior is not closed but is macroscopically open to the ingress of fluids, i.e. fluids can directly access the macroscopic interior of the implant structure, e.g. hollows 934, 938 or 942, and can also migrate into the implant through its pore network.